

REMARKS

This is in response to the Official Action of March 10, 2004. Reconsideration and allowance is respectfully requested.

Claims 1, 2, 4-7, 9-11 and 13 were rejected as being anticipated by the James patent, Patent No. 2,408,857. Admittedly James shows a snow remover with a housing for collecting snow, and with a power impeller and a discharge chute. However, the James discharge chute (there are two of them), while having a base section pivoted to a housing has only a screw adjusted pivoted extension on the outer end of the base chute section. Not only that, the James outer discharge chute section does not pivot to fold downwardly, but only pivots to a position that tends to cause it to change the pattern of snow discharge, it appears. Chute extensions 34 are hinged and may be adjusted to various angles by screw member 35, but they adjust the angle of discharge of the snow, rather than moving to a storage position, such as is now clearly defined in claim 1.

There is no suggestion in James of folding the chute extension 34 so that it would overlies a portion of the inlet opening of the housing that receives the snow, and the only suggestion is that longer links 37 can be provided, but the chute extensions will not extend downwardly beyond the dotted line position of base 33 in Figure 3, because the top of base 33 and the bottom of the chute extension 34 mate. The discharge chute section 33 is hinged for changing angles. When the base section 33 is tilted out as shown in Figure 3 in dotted lines, there still can be no folding down of the upper chute section 34 relative to the base section or relative to the housing because of the abutment of the lower end of the upper chute section 34 and the upper end of the lower chute section 33. The James chute sections can incline laterally outwardly, but they cannot fold down for storage.

In claim 1, the housing has now been redefined, and includes a front opening, with the impeller receiving snow from the front opening, and with the discharge chute of the rear of the housing. A horizontal pivot is defined between the upper chute section and the base chute section on a forward side of the base section.

The base chute section upper end is spaced above the housing, and the upper chute section forms an extension of base chute section in a working position. The upper chute section is foldable downwardly about the pivot (again the pivot is at the forward side of the base chute section) to be substantially in registry with the base chute section. An outer end of the upper chute section is then below the upper edge of the housing. In other words, the upper chute section is really folded down and out of the way for storage. The orientation of the hinge permits this folding for storage, while in the James patent no such folding for storage is achieved where the upper chute section would fold down across the front of the housing for the impeller.

Thus, it is respectfully submitted that claim 1 is allowable over James.

The support saddle that is defined in claim 2 is missing in the references. The support saddle that is mounted onto a movable strut supports the upper chute section on the housing when the upper chute section is folded. The strut has an end that is supportable on the base chute section to hold the upper chute section in a working position. In other words, there is a brace that holds that upper chute section in place. This is totally lacking in the James patent. There is no strut going back to the base chute section 33 from the upper extension 34 at all. The braces 37 are back to the housing itself. There is no teaching of a strut that has a saddle to rest on the housing when the upper chute section is folded. Thus, it is believed that claim 2, which has a strut that not only mounts the saddle to

hold the chute section into position when folded, but also is movable to provide for a positive member to hold the chute in its working position. The strut also is used to help pivot the upper chute section to its working position.

Claim 5 depends from claim 2 and is allowable therewith.

In regard to claim 6, it has been corrected to overcome the objection, and it defines a snow blower that has a forwardly facing inlet, and the discharge chute as specified has a base section mounted on a rear portion of the snow blower. The upper chute section has a discharge end pivotally mounted at an upper end of the base section about a horizontal pivot "at a forward side of the discharge chute", which again is totally lacking in the James et al. patent. This pivot at the front permits the upper chute section to fold down forwardly to overlies the forward facing inlet of the housing with the base chute section at the rear of the housing. Again, this is a storage position not an angular movement for changing the discharge direction or the amount of projection of snow.

Claim 6, it is respectfully submitted, defines a structural arrangement that is entirely different from James, and is not suggested by the James patent. The upper chute section extends downwardly so that it is adjacent a support surface for the snow blower, and is in fact supported on an upper forward edge portion of the snow blower.

Claim 7 adds in the strut that was previously mentioned and the positioning and operation of this strut is completely missing in the James patent. In claim 7, the strut has an end that is supportable on the base chute section when the upper chute section is in the working position to hold the upper chute section in the working position. This is certainly not suggested in the James patent, in that the control for pivoting the upper extension 34 in James is extended back to the housing itself.

In claim 9 the features of claim 1 have been incorporated in different language, but the discharge chute is specified as being at the rear of the housing that has the impeller. The upper discharge chute section is pivotally mounted to the base chute section at the forward side of the base chute section so that it can fold downwardly and forwardly and overlies the housing. A support bracket is carried on the upper chute section and is supported on an upper forward portion of the housing when the upper chute section is in a downwardly folded position for storage.

Again, that arrangement of folding and support is not possible with the James patent and the patent certainly does not teach or suggest it.

Claim 10 follows claim 7 and is allowable for the same reasons.

Claim 11 further specifies the strut extending from the pivot of the one end to rest on the housing when the upper chute section is folded down.

Claim 13 includes the support that is on the strut and the support rests on the upper edge of the housing.

Thus, claims 1, 2, 5-7, 9-11 and 13 are not shown or suggested by the James patent and are believed allowable. Action to that effect is respectfully requested.

Claims 1, 2, 4, 6, 7, 9, 10, 11 & 13 were rejected as being anticipated by the Husso Patent No. 4,651,452. Husso does show a snow removal device with a housing for collecting snow, and with an impeller and a two-section discharge chute. The discharge chute is located at one side of the snow blower housing, and it is hinged so that an upper section will fold downwardly, but it folds laterally out to extend the width of the snow blower housing substantially.

The independent claims in this application, as pointed out above, all include the two section chute with the hinge that

permits the upper chute section to pivot forwardly so that it is in front of the housing, and essentially overlies or aligns with the base chute section. The upper chute section is then supported on the housing in several of the dependent claims. While the Husso patent does show folding as stated, and indicates that folding is for storage, the Husso hydraulic actuator prevents the outer chute section from folding down so the outer end of the outer chute section is close to or supported on the housing when folded. Further, the orientation of the chute is such that it does not help substantially for storage because it extends the width of the impeller housing, rather than reducing the size for storage.

The use of the hydraulic cylinder 44 for controlling the pivoting, limits the amount of pivoting because as shown in dotted line representations in FIG. 1 of Husso, the chute extends laterally a substantial distance and cannot fold down to the housing so the outer end is supported on the housing. It is admitted that the outer end of the upper chute section is below the top of the housing when folded, but there is not any part of the housing that supports the outer end when the outer section is in its folded position, as is the case in the present device as shown in FIG. 2. Certainly there is no suggestion that the chute should fold over the front of the housing opening for the impeller.

Thus, it is respectfully believed that the construction that is present in the independent claims 1, 6 & 9 clearly defines over this reference.

While the Examiner has equated the hydraulic actuator to a strut, the strut has been redefined as being releasably connectable to the base chute section to support the upper chute section in the working position, with one end pivotally mounted to the upper chute section. This lets the strut move to a

position where it can be supported on the housing to in turn support the outer end of the upper chute section.

The features that have been recited clearly define non-obviously over the Husso reference and allowance of these claims over the Husso reference is respectfully requested.

Claims 3, 8, and 12 were rejected as being unpatentable over Husso in view of the Greider Patent No. 4,205,468. The Examiner indicates that Greider had a spring that was attached between the base chute section and the upper chute section such that the line of force of the spring goes over center relative to the horizontal pivot as the upper chute section folds to a folded position, and this was stated to mean that the spring exerts a force urging the outer end of the upper chute section towards the impeller. This is vigorously contested. In the Greider et al. patent, there is a spring, but it is a tension spring that merely extends as the deflector 14 is moved upwardly while under manual cable control. The spring merely acts to return the deflector to its working position. If the spring went over center in Greider, the deflector would remain in a raised position of in the lowed position.

In column 2, lines 22-34, of Greider, it shows overcenter positioning does not occur. The cable 25 is pulled, so it pulls the rod 26 rearwardly and causes the coil spring to be tensioned. If the cable is released the tension spring will automatically, in a positive fashion move the rod forwardly to lower the deflector 14 to decrease the angle of elevation of the snow. The deflector does not stay in the raised position. Further, it is submitted that the Husso patent has no suggestion the a spring would be useful for any function. Husso has a hydraulic cylinder for control of the upper chute section. Adding a spring would seem to be of no value.

In the present device, the spring is defined as going over center to urge the upper chute section to seat on the lower

chute section of to to be urged toward the housing. Claim 3 depends from claim 1 and is believed allowable, because this overcenter action of urging the chute first to its working position, and then when it is folded to its storage position, is a new feature that is not suggested in the references.

Claim 8 has been amended to include the features of claim 6 and is now an independent claim. Claim 8 includes the same feature of an overcenter spring. Claim 12 has been amended to incorporate the subject matter of claim 9. Both claims 8 and 12 define the overcenter force that urges the upper chute section to seat on the base chute section in the working position, and to urge the upper chute section towards the housing (where it is supported on an upper edge of the housing) when the upper chute section is folded.

Those features are clearly not suggested in the prior art, and a reading of the Greider patent, in column 2 clearly shows there is no teaching of overcenter action to hold a discharge deflector in two positions with the same spring to its working position.

Claim 14, which was indicated as being allowable, has also been amended to incorporate the subject matter of its parent claims, with the features of claims 10 and 11 re-worded to accommodate the overall combination. Favorable action on claim 14 as amended is respectfully requested.

In view of the amended claims, and the comments relating to the references, it is respectfully requested that the application should be allowed.

A form PTO 2038 in the amount of \$258 for the 3 new independent claims is enclosed.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Nickolas E. Westman, Reg. No. 20,147
Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312